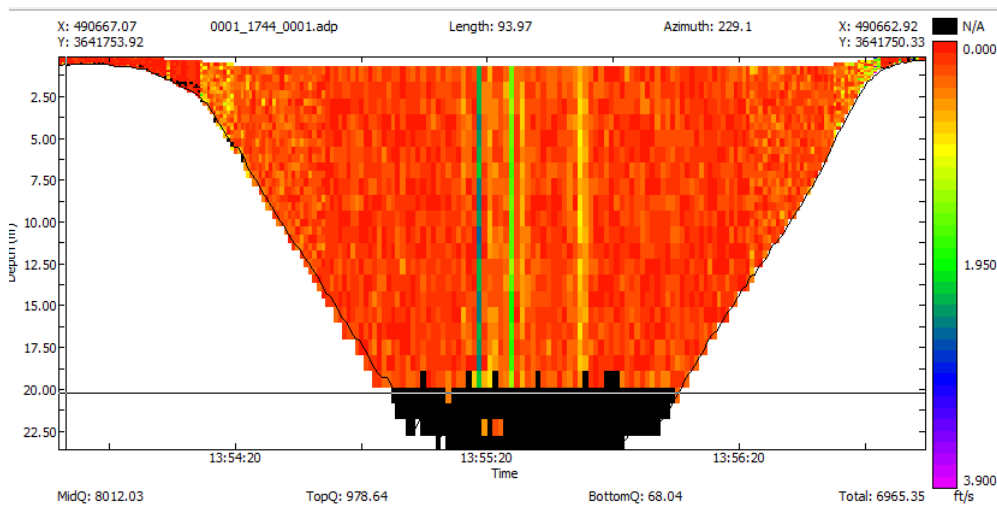




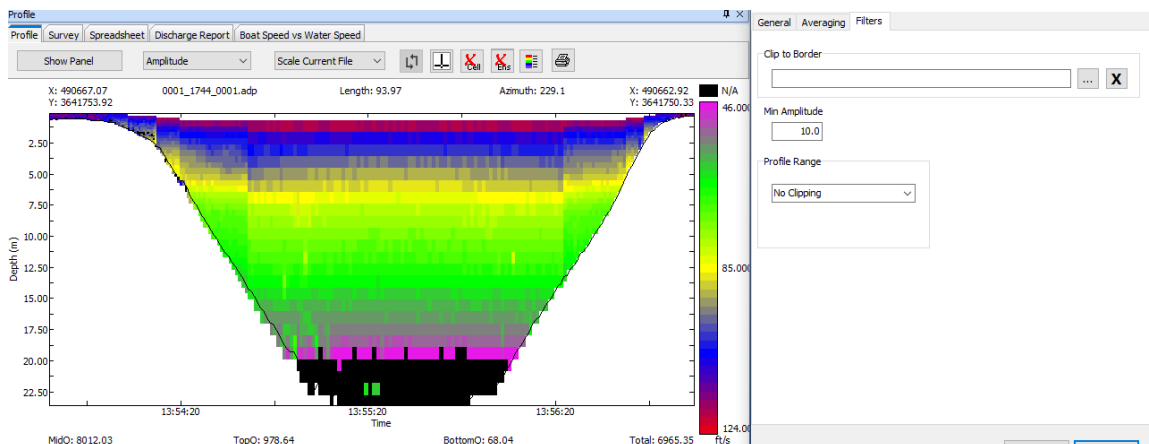
# Cleaning Up Data in ADCP Profile

By Ken Aiken

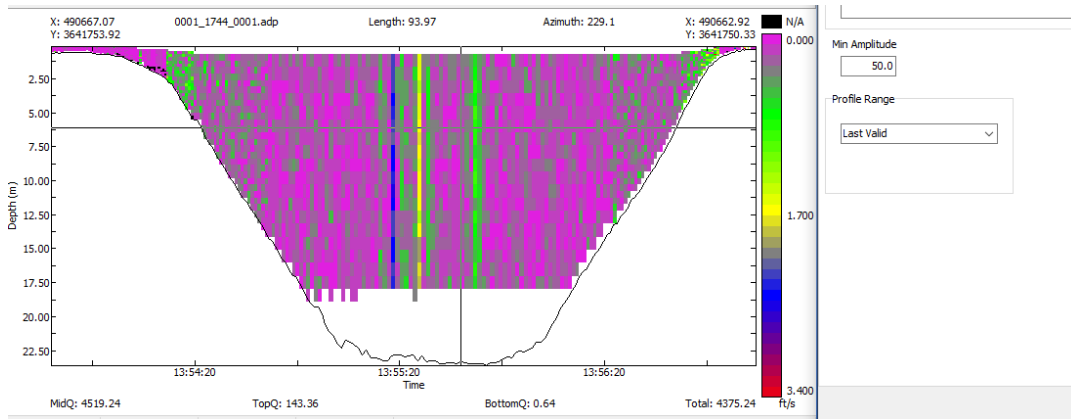
When loading data into the ADCP Profile, like with any other editor, you usually need to clean up the raw data before you can get good outputs.



As you can see with this data set the values at the furthest depths aren't good. We can solve this with a few different methods. In the Filters tab of the Options dialog, the simplest way is to change the Profile Range. Typically, the velocities near the bottom aren't very good with ADCPs due to various issues. The default selection for Profile Range in ADCP Profile is "Last Valid", however, in this picture I've disabled any clipping with the No Clipping selection. If "Last Valid" does not work well, you can also select between the "% of Profile" or "Cells" options to discard the bottom portion. Usually, the last 10% or 3 cells will remove the bad cells at the bottom.



Alternatively, you can filter by return intensity. Switching the display to show amplitude, you can see how far down the return signal has dropped off. Applying a minimum amplitude from the Filters tab will invalidate the cells, which cleans up the bottom as well.



Lastly, if you still have a handful of bad cells or ensembles, you can manually delete them using the Delete Cell and Delete Ensemble buttons from the HYPACK 2023 Q2 update. These tools allow you to remove bad cells and ensembles, cleaning difficult to remove erroneous velocities. However, there are a few things to be aware of at the moment. There is currently no undo button, so be careful clicking. Also, there is no saving of data, so if you close or reload your data you will lose the manually deleted velocities forever. Finally, ADCP Profile draws velocities from their time or DBL position on the right, left to the previous velocity. So, as you delete whole ensembles they will appear to “grow” from the left.

